Claims

[c1] What is claimed is:

An improved pedestrian and bicyclist safety railing comprising:

a rigid top aluminum bar having a longitudinal, recessed channel protruding outwardly relative to the center of said bar, said bar channel having a predetermined cross-sectional configuration that includes a pair of tabs forming upper and lower channel portions in said bar channel;

a second bottom bar substantially identical to said first bar;

a plurality of elongated, rigid pickets having substantially a predetermined cross section, with the width of one dimension of said rectangle being sized for a snug fit into said lower bar channel portions;

a plurality of spacer plugs having the same cross-sectional configuration as the cross-section of said bar channel including a pair of recessed portions for receiving said passage tabs for holding and interlocking said spacer plug within said bar passage, said spacer plugs being sized in length to provide the desired distance apart between said pickets when in spaced engagement between adjacent pickets; and

means for joining said first bar and said second bar in a parallel configuration with said plurality of pickets connected between said first bar and said second bar in a common plane, and spaced apart by a plurality of spacer plugs.

[c2] A safety railing as in claim 1, including:

said spacer plugs each being positioned between a pair of adjacent pickets and mounted within the top bar and the bottom bar, the end face of each spacer plug being substantially perpendicular to the longitudinal axis of each spacer plug for engaging in contact with the side wall of a picket for holding said picket in position.

[c3] An improved safety railing as in claim 1, including:

a first rigid post and a second rigid post welded to said top bar and said bottom bar; and

means for anchoring said first post and said second post to a concrete anchor connected to said first post and said second post.

[c4] An improved safety railing as in claim 1, to eliminate the welding joints between the pickets and the top and bottoms support bars in the guard railing, said guard railing being constructed of aluminum.

[c5] An improved safety railing as in claim 1 wherein:
said safety railing being suitable for mounting on an inclined surface, said spacer plugs having end faces angled substantially equal to the inclined angle of the safety railing relative to the longitudinal axis of the safety plugs for snug engagement with each picket to separate adjacent pickets.

[c6] A method of constructing an aluminum safety railing comprising the steps of:
forming a top bar and a bottom bar of aluminum and including a longitudinal channel disposed radially, outwardly in a predetermined direction and sized to receive the end portions of a plurality of aluminum pickets;
disposing a plurality of aluminum pickets, each having one end mounted within said top bar channel and the opposite end mounted in the bottom bar channel;
said pickets being sized to fit snugly in said top bar channel and said bottom bar channel;
disposing a plurality of spacer plugs slidably interlocked within said top bar channel and said bottom bar channel, spaced between each of said picket top portion and bottom portions and snugly engaged between adjacent pickets within said top bar channel and said bottom bar channel for rigidly holding said pickets in place without welding; and
connecting a support bar rigidly joining said top bar to said bottom bar at each end to form a guard railing; and
connecting a plurality of posts to said guard railing for anchoring into the earth.

[c7] A method as in claim 6, including the steps of:
providing an end picket at each end of the guard railing; and
welding the end pickets, top and bottom, to said top bar and said bottom bar, rigidly locking said remaining pickets and spacer plugs in place.